

## ***APPENDIX K***

### ***Wild Rapid River Resource Assessment***

***APPENDIX K***  
***Wild Rapid River***  
***Resource Assessment***  
***Table of Contents***

	<b><i>Page</i></b>
Introduction	K-1
Resource Assessment	K-1
<b>Traditional Use, Cultural – Outstandingly Remarkable Value</b>	K-2
<b>Prehistoric Cultural Resources - Outstandingly Remarkable Value</b>	K-3
<b>Historic Cultural Resources - Outstandingly Remarkable Value</b>	K-3
<b>Scenery - Outstandingly Remarkable Value</b>	K-4
Recreation	K-5
Geology	K-6
<b>Fisheries - Outstandingly Remarkable Value</b>	K-6
<b>Water Quality - Outstandingly Remarkable Value</b>	K-8
Wildlife	K-9
Vegetation/Botany	K-10

# **APPENDIX K**

## **Wild Rapid River Resource Assessment**

### **Introduction**

Rapid River was added to the national Wild and Scenic Rivers (WSR) System through the Hells Canyon National Recreation Area (HCNRA) Act in 1975. Approximately 27 miles of Rapid River was designated as a WSR: the mainstem from its headwaters to the National Forest boundary and West Fork Rapid River from the Hells Canyon Wilderness boundary downstream to its confluence with the mainstem. The entire designated river is classified as wild (free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted).

Rapid River is located on the Payette and Nez Perce National Forests; Riggins, Idaho is the closest town. The designated river is a part of the HCNRA, although it extends eastward from the core of the HCNRA. Rapid River is also within a roadless area (numbers 0412922 and 0117922), approximately 80 percent of which is managed to maintain its undeveloped character. The mainstem is a tributary to the Little Salmon River entering the Little Salmon River approximately four miles from the confluence of the Little Salmon with the Salmon River. West Fork Rapid River is a fourth-order tributary to Rapid River entering approximately six miles above the confluence of Rapid River and the Little Salmon River. The Rapid River Fish Hatchery is located on Rapid River and was built to mitigate lost runs of chinook salmon caused by the construction and operation of the Hells Canyon Dam.

### **Resource Assessment**

Rapid River was designated in 1975 without a WSR study. Before the amendment of the *Comprehensive Management Plan* (CMP) for the HCNRA, the river's outstandingly remarkable values had not been formally identified. The resource assessment process developed in the Pacific Northwest Region was used to determine whether specific resources are outstandingly remarkable. The criteria used in the Rapid River assessment are as modified in a technical paper developed by the Interagency Wild and Scenic Rivers Coordinating Council (USDA 1997). In order to be assessed as outstanding, a river-related value must be judged unique, rare, or exemplary at a regional or national level. The region of comparison for Rapid River is generally northeast Oregon and west-central Idaho.

Neither the *HCNRA Act* nor its legislative history provides a definitive statement of the values Congress intended to protect by designating the Rapid as a WSR. Section 7 of the *HCNRA Act* gives management direction for the HCNRA, of which the Rapid River is a part. Each of the resources mentioned in Section 7 has been evaluated in this assessment to determine if the resource is an outstandingly remarkable value of Rapid River.

The resource assessment for Rapid River is based on available literature and consultation with subject matter experts on the Payette, Nez Perce, and Wallowa-Whitman National Forests. The Nez Perce Tribe Circle of Elders provided invaluable expertise and knowledge of the traditional uses and cultural practices related to the Rapid River. The following text describes the criteria against which the present situation was evaluated, an evaluation of the present situation, and concludes with a finding.

## ***Traditional Use, Cultural***

### ***Criteria for Outstandingly Remarkable Value***

The river or area within the river corridor contains regionally unique location(s) of importance to Indian tribes (religious activities, fishing, hunting, and gathering). Locations may have unusual characteristics or exceptional cultural value being integral to continued pursuit of such activities. Locations may have been associated with treaty rights on ceded lands or activities unprotected by treaty, ceded lands, or in traditional territories outside ceded lands.

[Note: Items within brackets and italicized indicate site names or activities in the Nez Perce Language [*Nimiiputimt*] and are not found in other published citations.]

### ***Evaluation of the Present Situation***

The Rapid River [*yáwwinma*] corridor is within the Nez Perce [*Nimiipuu*] Tribe Treaty of 1855 ceded land. The *Treaty of 1855* provided, in part, for “The exclusive right of taking fish in all the streams where running through or bordering said reservation is further secured to said Indians, as also the right of taking fish at all usual and accustomed places.” In the 1970s and early 1980s, conflicts arose between the Nez Perce [*Nimiipuu*] and state agencies and local groups about the Nez Perce [*Nimiipuu*] rights to harvest salmon from the river. Subsequent court rulings prevailed in upholding these rights to off-reservation fishing in usual and accustomed places. Whole families were involved in making statements about their treaty rights and “the Rapid River episode is an important piece of legal history and resulted in an important piece of law that pertains directly to the Tribe” (Landein and Pinkham 1999).

The Nez Perce [*Nimiipuu*] fished mainly along the lower part of the Salmon River [*nacó'xkuus*] and the Little Salmon River, including tributaries to the Little Salmon, Rapid River [*yáwwinma*], and Boulder Creek [*tiíweni'cpe tiíwe*]. Other important areas included the Selway River [*seélwe*], the Little Salmon River [*múlpeí*] up to Big Payette Lake [*pe'xeliit kú·s*], the South Fork of the Salmon River and its tributaries, and as far south as the Boise River [*qapqapa'ál*]. The Snake River [*pik'uúnen* or *himeq'isnimeweélepe*] system provided salmon [*nacó'x*] in August [*Wáwama'mayq'áal*] (James 1996). Other significant areas for traditional Nez Perce [*Nimiipuu*] fishing and hunting in the region also included the Columbia [*xuyeélp*], Spokane, Deschutes [*although the nimiipuutimt word is not available, the river is still referred to as “river that leads to enemy country”*], John Day, Yakima, and Willamette Rivers (Landein and Pinkham 1999). “Several Nez Perce bands (particularly the White Bird [*lamtáama*] and Looking Glass [*tamaánma*] bands) fished this river for salmon” (Landein and Pinkham 1999). The *Saqáanma* (or Gorge People of the Wallowa Band) also utilized Rapid River [*yáwwinma*] as a salmon [*nacó'x*] fishery (Circle of Elders 2000). Members continue to fish on the Clearwater [*wiwiiceenime wiwice*], Columbia [*xuyeélp*], Rapid [*yáwwinma*] and Selway [*seélwe*] Rivers as part of their reserved treaty rights to fish in “usual and accustomed places” (Rhodes et al 1994).

There continues to be a strong connection between tribal members, Rapid River [*yáwwinma*], and the associated salmon fishery. Several Nez Perce [*Nimiipuu*] tribal members recount powerful stories of their first experience dip netting for salmon [*teqilpíse lipí*] on the Rapid River [*yáwwinma*]. The stories associated with Rapid River [*yáwwinma*] and the traditional fishing practices reveal the importance of the culture and tradition passed down to tribal families to protect the right to fish at “usual and accustomed places” as afforded by off-reservation rights (Landein and Pinkham 1999).

Today, tribal members still prefer salmon [*nacó'x*] in their diets and maintain the ceremonial role of salmon [*nacó'x*] as preeminent to their way of life. “Fish were mainly caught with gaffs [*lawýala*] until the 1970s when dip nets [*teqilpíse lipí*] became popular” (Landein and Pinkham 1999). Recently, however, a resurgence of gaffing [*lawýala*] and spearing [*iptiqiyuúse*] salmon is taking place in Rapid River [*yáwwinma*], as is the continued teaching of culture and skills to Nez Perce youth. The taking of a youth's first salmon [*nacó'x*] is a milestone in the life of a Nez Perce [*Nimiipuu*] and marks (through gifting of the salmon [*nacó'x*]) an important step toward becoming an adult member of and to help provide for and protect the greater Nez Perce [*Nimiipuu*] community.

## ***Finding***

Traditional use (the importance of the river to the Nez Perce Tribe for religious activities, fishing, hunting, and gathering) is an outstandingly remarkable value based on information provided by the Nez Perce Tribe.

## ***Prehistoric Cultural Resources***

### ***Criteria for Outstandingly Remarkable Value***

The river or area within the river corridor contains a site(s) or feature(s) where there is evidence of occupation or use by Native Americans. Sites must have rare or unusual characteristics or exceptional human-interest. Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare or sacred purposes. Of particular significance are sites or features listed in or eligible for inclusion in the National Register of Historic Places.

### ***Evaluation of the Present Situation***

In the preamble of the HCNRA Act, archaeological and historical cultural resources are afforded premier standing within the structure of the legislation. The WSR corridor contains an accumulation of riverine archaeological and historic resources. This is largely because of the extreme isolation of the canyon and the fact that the HCNRA was spared further hydroelectric development.

To date, one prehistoric site, a trail that may be prehistoric, and a historic site with a prehistoric component have been recorded within the Rapid River corridor. Additionally, other prehistoric sites may exist within the corridor based on evidence of rock shelters, pictographs, and cupuled rocks (cu·pule noun: cup-shaped part: a cup-shaped body part or plant part, such as that enclosing the base of an acorn) recently recorded at the confluence of the Rapid River and Little Salmon River. This will not be known until further surveys have been accomplished. The prehistoric site is an extensive lithic scatter (lithic: of or belonging to stones). The dual component site contains culturally peeled trees. The prehistoric site is eligible for the National Register of Historic Places.

## ***Finding***

The prehistoric cultural resources within the wild river corridor represent an outstandingly remarkable value.

## ***Historic Cultural Resources***

### ***Criteria for Outstandingly Remarkable Value***

The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare, unusual, or one-of-a-kind in the region. Many such sites are listed on the National Register for Historic Places, which is administered by the National Park Service. Historic sites and/or features in most cases are 50 years old or older. Of particular significance are sites or features listed in or eligible for inclusion in the National Register of Historic Places.

## ***Evaluation of the Present Situation***

In the preamble of the *HCNRA Act*, archaeological and historical cultural resources are afforded premier standing within the structure of the legislation. The WSR corridor contains an accumulation of riverine archaeological and historic resources. This is largely because of the extreme isolation of the canyon and the fact that the HCNRA was spared further hydroelectric development.

Twelve historic sites have been recorded within the Rapid River corridor. Seven of these sites are eligible or potentially eligible for the National Register of Historic Places. The eligible or potentially eligible historic sites include three homestead and/or mining cabins, a historic FS Administrative site with two cabins, a trail, and two stock driveways. The five historic sites, which have been unofficially determined ineligible by the FS, include two cabin ruins, two mining sites, and a grave. However, examined as a whole, along with the eligible sites, these potentially ineligible sites may provide information that is important to history or prehistory and therefore may actually be significant. Although not meeting National Register criteria, the grave must be protected under other laws and can provide information important to regional history. Additional historic sites may exist within the corridor; however, this will not be known until further surveys have been accomplished. The archaeological and historical research potential of the river corridor is unlimited.

## ***Finding***

**The historic cultural resources within the wild river corridor represent an outstandingly remarkable value.**

## ***Scenery***

### ***Criteria for Outstandingly Remarkable Value***

The landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features and/or attractions. When analyzing scenic values, additional factors such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.

## ***Evaluation of the Present Situation***

The Rapid River corridor is classified as Variety Class A, indicating it contains distinctive visual features. The riverine setting is generally natural in appearance with human activity such as grazing, mining, and recreation use having relatively little impact to scenic character. The lower four miles of the mainstem are the most scenically diverse with views of the canyon's interesting rock outcrops and the river's pools, cascades, and clear water. The riverside trails provide an occasional distant view of the craggy peaks in the Seven Devil's area; however, the foreground view is generally limited to the immediate riparian zone due to the narrowness of the canyon and its steep walls. The user's focus is on the river, its fast-moving water, and diverse riparian vegetation.

The river's gradient is steep; elevations range from approximately 2400 feet at the lower end near the fish hatchery to 6800 feet at the headwaters of the mainstem Rapid River. This elevation range contributes to considerable vegetative diversity. Lower elevations support ponderosa pine, Douglas fir, grand fir and western larch transitioning to Engelmann spruce, lodgepole pine, and subalpine fir at higher elevations. Particularly at upper elevations, forest stands are mature and overly mature with numerous snags and downed wood in the foreground. The riparian zone is 80-100% occupied by shrub vegetation under the tree canopy with Pacific yew at lower elevations adding to the diversity of the understory.

The river's gradient also contributes to diversity of interaction of water and watercourse. Many portions of Rapid River flow through pools and cascade/riffle complexes that draw the observer's focus to the river. Although most of these complexes are small, a falls/cascade complex about 500 feet high is located approximately one-quarter mile up West Fork Rapid River.

## ***Finding***

The change in elevation and topography over this relatively short river system results in highly diverse scenery and visual attractions. The steep gradient and narrow canyon focus the viewer's perspective on the water's interaction with its watercourse and riparian vegetation, with past human activities noticed only slightly, if at all. **The scenery of Rapid River is found to be an outstandingly remarkable value.**

## ***Recreation***

### ***Criteria for Outstandingly Remarkable Value***

Recreational opportunities are or have the potential to be popular enough to attract visitors from throughout or beyond the region of comparison or are rare, unusual, or unique to the region. Visitors are willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but are not limited to, sightseeing, wildlife observation, camping, photography, hiking, fishing, hunting, and boating/rafting.

- Interpretive opportunities may be exceptional and attract or have the potential to attract visitors from outside the region of comparison.
- The river may provide or have the potential to provide settings for national or regional usage or competitive events.

### ***Evaluation of the Present Situation***

Rapid River is a part of the HCNRA and also within the Rapid River roadless area. The wild river corridor offers a variety of dispersed activities that are nonmotorized activities, including hunting, fishing, hiking, horseback riding, and camping. Trail 113, beginning near the fish hatchery, provides the major trail access into the lower river corridor. This trail follows the mainstem and then up the West Fork Rapid River, accessing the Seven Devils area of the Hells Canyon Wilderness. Trail 177 follows the mainstem Rapid River from its confluence with the West Fork to its headwaters. This trail also provides access into the Hells Canyon Wilderness. Several trails extend from the uplands into the mainstem Rapid River. Several of these trails have a designation that allows two-wheeled-motorized use; Trails 183 and 184 allow motorized crossings of the mainstem. However, most trail use in Rapid River is by foot and horse. Boating, even by small craft such as kayaks, is precluded by a combination of access and the river's narrow channel width and steep stream gradient.

The substantial size of the roadless area and the rugged terrain of the river corridor provide high-quality semi primitive recreation opportunities. Due to its remote location and ruggedness, overall recreation use is low. The river corridor offers the recreationist solitude, particularly outside the spring or fall use season. The most popular recreation activity is fall hunting with the river corridor providing access to higher elevations. It also offers spring hiking and backpacking before the higher elevations open. This early-season use is increasing in popularity. Most of the users come from local communities (McCall, New Meadows, Riggins), although use from the Treasure Valley about 100 miles to the south (Boise, Nampa, Caldwell) and the Moscow-Pullman area 200 miles to the north is increasing.

## ***Finding***

Rapid River is recognized for providing recreation users the opportunity for solitude in a scenically diverse river setting. It further provides for fall hunting and early-season hiking and backpacking. However, most of the use is from within the region of comparison and the recreation setting, while notable, is not rare, unusual, or unique. Recreation is not an outstandingly remarkable value.

## **Geology**

### ***Criteria for Outstandingly Remarkable Value***

The river or the area within the river corridor contains one or more example of a geologic feature, process, or phenomenon that is rare, unusual, or unique to the region of comparison. The feature(s) may be in an unusually active stage of development, represent a "textbook" example, and/or represent a unique or rare combination of geologic features (erosional, volcanic, glacial, or other geologic structures).

### ***Evaluation of the Present Situation***

The mainstem and its west fork are primarily steep gradient streams enclosed in a narrow canyon with steep walls. Rock exposure is limited due to abundant cover vegetation.

The Rapid River drainage lies within the Blue Mountains Province of eastern Oregon, western Idaho, and southeastern Washington. The Blue Mountains Province is comprised of a composite exotic terrane that formed in the ancestral Pacific Ocean over a period of approximately 250 million years and then traveled hundreds of miles on the back of one or more tectonic plates in the ancient Pacific Ocean to eventually dock on the North American continent approximately 120 million years ago. The Blue Mountains Island Arc consists of five separate terranes that formed within different parts of the island arc and include the Baker, Grindstone, Izee, Olds Ferry, and Wallowa terranes. The Rapid River drainage is thought by geologists to belong to the Wallowa terrane and represents rocks formed along the volcanic axis of the arc. Individual rocks within the river corridor have been mapped as Doyle Creek and Martin Bridge Limestone. Basalt of the Columbia River Basalt Group (6-16 million years) overlies the Doyle Creek and Martin Bridge Limestone. These rocks have then been highly metamorphosed due to extensive faulting and are generally referred to as greenstone.

### ***Finding***

Although the geology within the Rapid River corridor represents an example of an ancient island arc and could provide scientists with valuable information on earth history and processes, poor access; poor exposure; and extensive metamorphism diminish its potential as a good research area. Based on this factor, geology is not an outstandingly remarkable value.

## **Fisheries**

### ***Criteria for Outstandingly Remarkable Value***

Fish values may be judged on the relative merits of either fish populations or habitat or a combination of these river-related conditions.

- **Populations** - The river is nationally or regionally an important producer of resident and/or anadromous fish species. Of particular significance is the presence of wild stocks and/or federal or state-listed or state-candidate threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of outstandingly remarkable.
- **Habitat** - The river provides exceptionally high quality habitat for fish species indigenous to the region. Of particular significance is habitat for wild stocks and/or federal- or state-listed or candidate threatened, endangered or sensitive species. Diversity of habitats is an important consideration and could, in itself, lead to a determination of outstandingly remarkable.



## ***Evaluation of the Present Situation***

Rapid River and its West Fork contain three threatened fish species: spring/summer chinook salmon, steelhead, and bull trout.

**Chinook:** Snake River spring/summer chinook salmon are listed as threatened. Chinook stocks within the Snake River system are at all time low numbers, although little quantifiable population data on the condition or trend of these natural stocks is available. These species occupy the mainstem Little Salmon River and major tributaries, including Rapid River. The fish have been observed in Rapid River to Fry Pan Creek. All perennial streams in the Little Salmon River watershed are included as critical habitat. Specific to Rapid River, critical habitat for spawning and rearing extends upstream 16.7 miles to Lake Fork Creek where the physical size of the stream becomes too small for anadromous fish passage. Tributaries to Rapid River within the WSR Corridor, Lake Fork Creek, Paradise Creek, Fry Pan Creek, Castle Creek, and Copper Creek may be of sufficient sizes and gradients to have potential for spawning and/or rearing of anadromous fish at their mouths. Habitat in West Fork Rapid River for spawning and rearing extends from its mouth upstream approximately one-quarter mile to a falls/cascade complex about 500 feet high that acts as a complete barrier to anadromous fish passage. The Rapid river and its tributaries below natural impassable barriers are ESA designated critical habitat for chinook salmon.

**Steelhead:** The Snake River Basin steelhead is ESA listed as threatened for summer runs. Steelhead have been documented in the Little Salmon River and the lower portions of some minor tributaries. In Rapid River, steelhead have been observed passing the hatchery weir heading upriver to spawn in unknown locations; juveniles are found in Rapid River and the West Fork to the passage barrier. The Rapid River and its tributaries below natural impassable barriers is ESA designated critical habitat for Snake River Basin steelhead.

**Bull Trout:** The Columbia River bull trout species is listed as threatened. The Rapid River supports two stocks of bull trout: fluvial and resident populations. The life cycle of the fluvial population requires portions of Rapid River and migration into the Little Salmon and main Salmon Rivers. The life cycle of the resident population takes place entirely within the Rapid River system. While critical habitat has not yet been officially determined for bull trout, a multi-year radio-tracking project has defined spawning locations, relative numbers of fish, and the timing of migration. The primary spawning area for the fluvial population is from the confluence of the West Fork Rapid upstream in the mainstem to Sinking Creek and in Granite Creek to its confluence with Rose Creek, a tributary to Lake Fork Creek. The primary spawning area of the resident population overlaps the fluvial stock and likely extends above Sinking Creek in the mainstem of Rapid River. The eventual critical habitat will include four life cycle components: spawning areas; overwintering (fluvial stock in the Little Salmon and main Salmon); connectivity, i.e. migratory corridors; and summer rearing (Rapid River and West Fork Rapid River to the passage barrier).

**Other Species:** Rapid River and its West Fork contain native redband rainbow trout, mountain whitefish, sculpin, dace, and introduced eastern brook trout. The Rapid River watershed is within the historical range of westslope cutthroat trout. While very little presettlement information exists, a few cutthroat have been observed in the bull trout study. It is unknown if these fish are from naturally reproducing populations or are migrants from mountain lake stocking. Rapid River and its West Fork also contain the Idaho giant salamander and the spotted frog.

**Habitat:** Lack of major land-disturbing activities in Rapid River contributes to near-natural habitat conditions for all three threatened species. The Intermountain Research Station's paired watershed study (Overton et al 1993) found mean surface fines for habitats in Rapid River at 8.18 percent. Large woody debris was significantly more abundant than in Boulder Creek (6.81 pieces/100 meters). Bank stability was greater than 95 percent throughout Rapid River and the stream channel is narrow and confined (mean width/depth ratio of 17.21). Stream temperatures ranged from 7.5 to 12.2 degrees centigrade with a mean of 9.7 degrees. Measured stream temperatures met Idaho State water quality standards for spawning salmonids.

**Hatchery Operation:** The Rapid River Fish Hatchery is a spring chinook hatchery owned by the Idaho Power Company and operated by the Idaho Department of Fish and Game. It was built in 1964 to mitigate lost runs of chinook salmon caused by the construction and operation of Hells Canyon Dam. The fish produced are stocked below Hells Canyon Dam, released directly into Rapid River, and planted in nearby drainages when excess fry are available. Idaho Power is required by the NOAA-Fisheries to rear three million juvenile spring chinook annually, the majority of which are released directly into Rapid River. The wild chinook that arrive at the Rapid River adult-trapping facilities in August and September are released directly into Rapid River to maintain a

naturally reproducing population. An unknown degree of genetic mixing has occurred due to hatchery brood stock selection.

## ***Finding***

Rapid River contains three listed fish species (spring/summer chinook salmon, steelhead, and bull trout) and designated critical habitat for chinook and steelhead. Rapid River also contains the spotted frog, a sensitive species in Region 4. In terms of habitat, the Rapid River watershed is the largest and best remaining aquatic stronghold within the Little Salmon River system. It is a key area for the survival and recovery of listed salmon, steelhead, and bull trout. **The populations of nationally significant fish species and the river's near-natural habitat combine to a finding that fisheries is an outstandingly remarkable value for Rapid River.**

## ***Water Quality***

### ***Criteria for Outstandingly Remarkable Value***

The river has exceptionally pure, clear, and/or clean water. The river is known for its water quality nationally or regionally. The river provides exceptionally high water quality for a variety of beneficial uses including, but not limited to those uses by fish, wildlife, recreationists, and communities.

### ***Evaluation of the Present Situation***

The flow regime of Rapid River generally follows a pattern of high flows during spring snowmelt, followed by gradual recession during summer, fall, and winter. While this is not atypical for streams in the area, stream gauging records suggest that streamflows in Rapid River do not fluctuate as quickly as most streams in the area of comparison. This is presumably due to the geologic characteristics of the watershed, which provide for higher infiltration and greater groundwater storage than most other local streams. The net result is an aquatic habitat that is closer to the optimum for salmonids.

Relative to other streams in the area, Rapid River has high summer and fall flows. This translates into lower summer water temperatures than are typical for a river at this elevation. Lower water temperatures are also a result of the confined canyon/shading provided by the canyon walls; high quality riparian condition (forest and shrub layers); and the narrow channel (less surface area to heat). Stream temperatures are recorded on daily at the fish hatchery. Temperatures are well within the limits expected for a natural stream and closer to the optimum for salmonid spawning and rearing than other local streams. Although water temperature data is unavailable for West Fork Rapid River, there is no reason to expect that temperatures are elevated above natural conditions. The temperature of Rapid River should remain near natural, given current management direction and limited levels of development and activities in the watershed.

Sediment yield and suspended sediment concentration in Rapid River are low during most of the year. A high proportion of annual sediment yield occurs during the rising limb and peak of the annual snowmelt hydrograph, but the river tends to clear quickly. Sediment yield can occasionally be very high, particularly in response to storms affecting the lower portions of the watershed. This part of the watershed is composed of highly erodible breaklands that are prone to mass failure and undercutting by the stream. These events are relatively infrequent and short-lived. A generally well-vegetated riparian area provides bank stability, in addition to providing stream shade, overhead cover, and input of organic matter.

The conductivity of Rapid River water is higher than most streams in the area. Conductivity is an indicator of dissolved constituents and is related to geologic characteristics. The higher conductivity suggests that the stream may be somewhat more productive than other local streams.

## ***Finding***

The importance of the water quality of Rapid River is recognized in the *HCNRA Act* to assure that water quality is maintained. "In comparison to other rivers in the region of comparison, the water quality of Rapid River is exceptional as far as temperature, sediment yield, suspended sediment, and conductivity. **The water quality of Rapid River is an outstandingly remarkable value.**

## ***Wildlife***

### ***Criteria for Outstandingly Remarkable Value***

Wildlife values may be judged on the relative merits of either terrestrial or aquatic wildlife populations or habitat, or a combination of these conditions.

- ***Populations*** - The river or area within the river corridor contains nationally or regionally important populations of indigenous wildlife species. Of particular significance are species considered unique, or populations of federal- or state-listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could in itself lead to a determination of outstandingly remarkable.
- ***Habitat*** - The river or area within the river corridor provides exceptionally high quality habitat for wildlife of national or regional significance, or may provide unique habitat or a critical link in habitat conditions for federal- or state-listed (or candidate) threatened, endangered and sensitive species. Contiguous habitat conditions are such that the biological needs of the species are met. Diversity of habitats is an important consideration and could, in itself, lead to a determination of outstandingly remarkable.

### ***Evaluation of the Present Situation***

Many species of wildlife typical to the region of comparison inhabit the river corridor, including Rocky Mountain elk, mule and white tail deer, wolverine, pine marten, cougar, black bear, bobcat and rattlesnake. Over 75 species of birds utilize the river corridor, including golden eagle, peregrine falcon, goshawk (nest site below confluence of Lake Fork Creek and Rapid River), white-headed and pileated woodpeckers, and mountain quail. Rocky Mountain bighorn sheep are known to inhabit the upper headwaters of the Rapid River drainage.

Two threatened and endangered species have the potential to use the river corridor: wolf (endangered) and grizzly bear (threatened). The potential use by wolf and grizzly bear is based on the presence of these species in other parts of Idaho (grizzly bear within approximately 200 miles of Rapid River). Peregrine falcon, which was recently delisted, does utilize other portions of the Rapid River roadless area with identified nest sites located several miles from the river corridor. Wildlife habitat within the Rapid River corridor is varied, ranging from high elevation, subalpine fir to low elevation Douglas fir, grand fir, ponderosa pine and western larch. Within the ponderosa pine type, small grassland openings provide habitat variety. Small meadows are dispersed throughout the higher elevations. The Rapid River watershed provides key elk and deer winter range, elk security areas, big game migration routes, and bighorn sheep summer range. All of these habitats occur within the river corridor. It is also likely that the corridor serves as a migration corridor for species from the Little Salmon into the Snake River drainage.

## ***Finding***

Wildlife populations and habitat are diverse within the river corridor but are not unique or rare within the region of comparison individually or in combination. Wildlife is not an outstandingly remarkable value.

## **Vegetation/Botany**

### **Criteria for Outstandingly Remarkable Value**

The river or area within the river corridor contains nationally or regionally important populations of indigenous plant species. Of particular significance are species considered unique and populations of federally listed or candidates for being listed as threatened or endangered species. When analyzing vegetation, additional factors such as diversity of species, numbers of plant communities, and cultural importance of plants may be considered.

### **Evaluation of the Present Situation**

Rapid River originates at an elevation of approximately 6800 feet, dropping to 2000 feet at its confluence with the Little Salmon River. The area has strongly contrasting vegetation types, primarily keyed to aspect and elevation. The lower elevations support mixed conifer species, including ponderosa pine, Douglas fir, grand fir and western larch. Seral stands of large, mature ponderosa pine occupy the timbered slopes within the river corridor. Engelmann spruce, lodgepole pine, and subalpine fir, interspersed with small forb and grass meadows, are found at higher elevations. Southern aspects that lack forested stands are principally native bunchgrass types within the river corridor.

Several low brush and grass species such as pinegrass, wheatgrass, fescue, ceanothus, snowberry, ninebark, serviceberry, and willow grow on the steep, dry, western, and southern exposures. Elk sedge, huckleberry, meadow rue, mountain maple, pinegrass (*Calamagrostis fasciculata* Kearney), violet, alder, and beargrass occur in the more cool and moist areas. The riparian area at lower elevations also contains Pacific yew; it is a disconnected population near the end of its southern range. A sensitive plant, Puzzling halimolobos, occurs within the roadless area. It is typically found within the ponderosa pine type and is, therefore, likely to occur at lower elevations of the river corridor.

### **Finding**

The vegetation, including individual species and plant associations, is diverse but not unique or rare within the region of comparison. Vegetation/botany is not an outstandingly remarkable value.